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OFFICIAL ROUTING SLIP 25X1

TO	NAME AND ADDRESS	DATE	INITIALS
1	DD/NFAC	29 AUG 1978	
2	<i>Leg Counsel</i>	30 Aug	
3	DDCI	8/31/78	
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Approved For Release 2004/03/25 : CIA-RDP81M00980R003200070026-2  
The Deputy Director of Central Intelligence

Washington, D.C. 20505

31 AUG 1978

CLC #78-3076

OLC #78-3076

The Honorable Dale L. Bumpers  
Senate Committee on Appropriations,  
Subcommittee on Defense  
United States Senate  
6243 Dirksen Senate Office Building  
Washington, D.C. 20510

SAC

Dear Senator Bumpers:

During my appearance before the Defense Subcommittee of the Senate Appropriations Committee on 10 August, you asked how much it would cost the Soviets to develop a defense against the cruise missile. I asked our experts in CIA to respond to this question. I attach for your information a paper which addresses the question in light of air defense developments in evidence in the USSR and our estimates of Soviet technical capabilities and deployment programs during the next ten years.

Sincerely,

ISI

Frank C. Carlucci

Attachment

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28 August 1978

ESTIMATED COSTS OF SOVIET STRATEGIC AIR DEFENSE FORCES  
OVER THE NEXT TEN YEARS

Question: How much would it cost the Soviets to develop a defense against the cruise missile?

1. We believe that a Soviet defense against cruise missiles will be limited not so much by cost as by the level of technology available to support the design and development of new weapons systems. The Soviets currently are grappling with many of the problems peculiar to low-altitude defense, but dealing with inflight cruise missiles will be a difficult proposition because of their small size and low altitude. It will certainly require much better weapons than we see in the Soviet inventory or currently under development.

2. In projecting likely developments in Soviet strategic defenses over the next ten years we have incorporated our best estimates of the kinds of systems they can deploy against low-altitude threats, including cruise missiles, and of the levels of deployment they can probably achieve. We anticipate improved low-altitude fighters, surface-to-air missiles, and an AWACS capability. Because we think the Soviets cannot concentrate on one aspect of the threat (such as cruise missiles) to the exclusion of others, and because systems with some capability against cruise missiles can also intercept bombers, we do not consider it realistic to break our estimates of future Soviet strategic air defense costs into "anti-cruise missile" and other compartments. Our projections are for an integrated Soviet air defense system, designed to improve low-altitude defense capabilities generally. It will be more costly than the system the Soviets are now operating.

3. On this basis, we estimate that the total cost over the next ten years of procuring, operating and maintaining the entire Soviet strategic air defense force (including manpower costs) would be about \$125 billion (in 1977 dollars) if this force were duplicated in the US. The average annual cost of some \$12 billion will be about ten percent higher than the average annual cost of Soviet air defenses (in 1977 dollars) during the past five years. Of the total cost of Soviet air defenses during the next ten years, we estimate that some \$30 billion will be for those interceptors, SAMs and AWACS having some capability for defense against cruise missiles. Costs for these systems could be as high as \$50 billion if they make a more intensive effort resulting in larger forces.

4. As to research and development costs, which would be in addition to those estimated above, we do not presently have any reliable basis in information and analysis for breaking down our estimate of total Soviet military R&D expenditures into sub-components. We estimate that the total cost of Soviet

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military R&D in 1977 would be on the order of \$20 billion if this R&D were duplicated in the US. We expect these costs to rise in the future but cannot estimate by how much. A large but unknown portion of Soviet R&D expenditures are for strategic systems, including air defense systems.

5. As to the future effectiveness of Soviet defenses, the improvements we project have the potential of making low-altitude penetration by today's bombers considerably more difficult by the mid-1980s, or perhaps somewhat earlier with a high level of effort. With respect to defense against cruise missiles, the technical characteristics of the air defense systems the Soviets will probably have in the period to 1987 lead us to judge it unlikely that they can deploy sufficient defenses to cover all the areas they would want to protect. Moreover, we believe that technical and operational weaknesses of Soviet air defenses will lead to a poor quality of defense against cruise missiles in the approach corridors and target areas covered. Thus, we conclude that the overall effectiveness of Soviet air defenses against a large cruise missile attack during the middle and late 1980s will still be low.

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THE DIRECTOR OF  
CENTRAL INTELLIGENCE

National Intelligence Officers

SP - 249/78  
28 August 1978

MEMORANDUM FOR: Deputy Director for Central  
Intelligence

VIA: Deputy Director, National Foreign  
Assessment Center

FROM: National Intelligence Officer  
for Strategic Programs

SUBJECT: Proposed Response to a Question  
from Senator Bumpers

The attached letter, recommended for your  
signature, forwards to Senator Bumpers a response  
to the question he posed to you during your  
appearance before the Defense Subcommittee of the  
Senate Appropriations Committee on 10 August. This  
response was drafted by OSR.

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Attachment

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SP - 249/78

SUBJECT: Proposed Response to a Question from  
Senator Bumpers

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